

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Stephen V.R. Hellriegel et al.
Application No. : 10/012,210
Filed : November 5, 2001
For : ELECTRICAL CONNECTOR WITH STRAIN RELIEF
STRUCTURE

Examiner : Tuan T. Dinh
Art Unit : 2827
Docket No. : 901115.435
Date : September 10, 2004

Assistant Commissioner for Patents
Washington, DC 20231

RULE 37 CFR 1.131 DECLARATION

Assistant Commissioner for Patents

We, Stephen V.R. Hellriegel and Alexander I. Yatskov, do hereby declare the following:

We are the inventors of the subject matter of claims 1-21 currently pending in the above referenced U.S. Patent Application Serial No. 10/012,210, having a filing date of November 5, 2001, and claiming priority from a provisional application having a filing date of November 2, 2001.

We have reviewed U.S. Patent No. 6,595,784 to Brodsky et al., having an issue date of July 22, 2003, and a filing date of May 15, 2001.

The invention as claimed in current claims 1-21 was reduced to practice prior to March 15, 2001.

We made the invention, to which the above referenced application is directed, in the U.S. prior to the May 2001 filing date of the Brodsky et al. patent. In particular, we completed the invention by reducing the invention to practice prior to May 15, 2001.

Application No. 08/866,456

Attached hereto as Exhibit A is a true copy of an engineering drawing including detailed specifications of a flexible connector device, showing an embodiment of the invention. Exhibit A bears the names of one co-inventor, Steven Hellriegel, and of a draftsman, Greg Scott. We note that the signatures of both individuals bear dates of July 11, 2000, well before May 15, 2001. The document further records a revision, dated October 31, 2000, and a "Released PDF" date of November 8, 2000. Much of the text, including many of the detailed notes, has been redacted, inasmuch as it relates to proprietary information, and is not relevant to the issue at hand.

Exhibit B is an enlargement of detail D from the engineering drawing of Exhibit A. Accordingly, for example, the top side view of Exhibit A may be seen to correspond to Figures 1 and 5 of the specification, while detail D of the Exhibit A, as shown more clearly in Exhibit B, may be seen to correspond, in particular, to Figure 6. Exhibit B clearly shows apertures positioned between contact pads, as described in the specification, for example, with reference to Figures 5 and 6, and as recited in many of the claims. Exhibit B also clearly shows the positioning of the apertures to cut the plating stringers, as is also described in the specification with reference to Figure 6, and as claimed.

The connector detailed in the drawing of Exhibits A and B was reduced to practice as an embodiment of the invention disclosed and claimed in the present application. The structure shown in Exhibit A was actually built on or around the July 11, 2000 signature date of Exhibit A. It was completed and tested well prior to the October 10, 2000 date shown for Revision B. Namely, there was a reduction to practice, and testing of Revision A sometime between July 11, 2000 and October 10, 2000.

We further declare that sometime after the July 2000 date shown on the engineering drawing of Exhibit A, we disclosed the invention in a meeting with a representative of the firm, Seed Intellectual Property Law Group PLLC. Exhibit C is a copy of a page of notes recorded by that representative during that meeting, taken from the files of the firm. We have seen a copy of Exhibit C, on which a date is written in the upper right hand corner. While this date has been blanked out in the copy sent to the U.S. Patent and Trademark Office, We have seen a copy which includes this date and hereby verify that this date is prior to May 15, 2001. In

Application No. 08/866,456

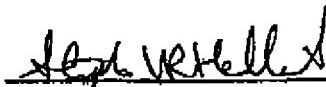
all other respects, the copy appearing as Exhibit C is a true copy of the page from the files of the law firm, and the date recorded on the original correctly indicates the date of our disclosure.

Exhibit C clearly contains references to features disclosed and claimed in the present application, including rectangular holes located between contacts to make the connector "more compliant in area of contacts[, and to accommodate] more contact[s while requiring] less force." Exhibit C further discloses, as a possible advantage to the features shown "...so individual contacts can move independently out of plane," and to "take out material constraint [to] local deformation[, to] conform to terrain of printed circuit board." The sketch and text of Exhibit C closely correlate with methods and features disclosed and claimed in the present application. See, for example, Figures 5, 6, and 9, and the accompanying text.

We further declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

9/10/2004

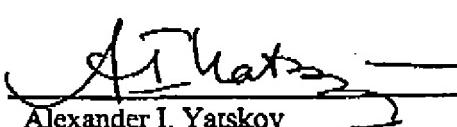
Date



Stephen V.R. Hellriegel

9/13/2004

Date



Alexander I. Yatskov

901115.435.S12677_1

REV	DESCRIPTION	DATE	APPROVED
B	REVISED DRILL CHART .020 DRILL WAS .019 IN.	10/31/00	



COPPER GRAIN DIRECTION

HOLE TO HOLE
R. 1660
2X .030
2X 5°
SEE DETAIL B

R. 50
2X .030
2X 5°
.58
R. 12
4X

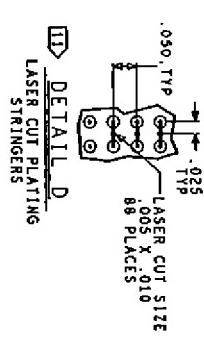
HOLE TO HOLE
1.4000
1.330
.035
.350
.700
.575
1.8500
2.39

HOLE TO HOLE
-.3270
1.330
.035
.350
.700
.575
1.8500
2.39

SEE DETAIL D
225
3X .675
-.2K 1.925
2.315 ±010
.27
.2100
.270

TOP SIDE VIEW

-002



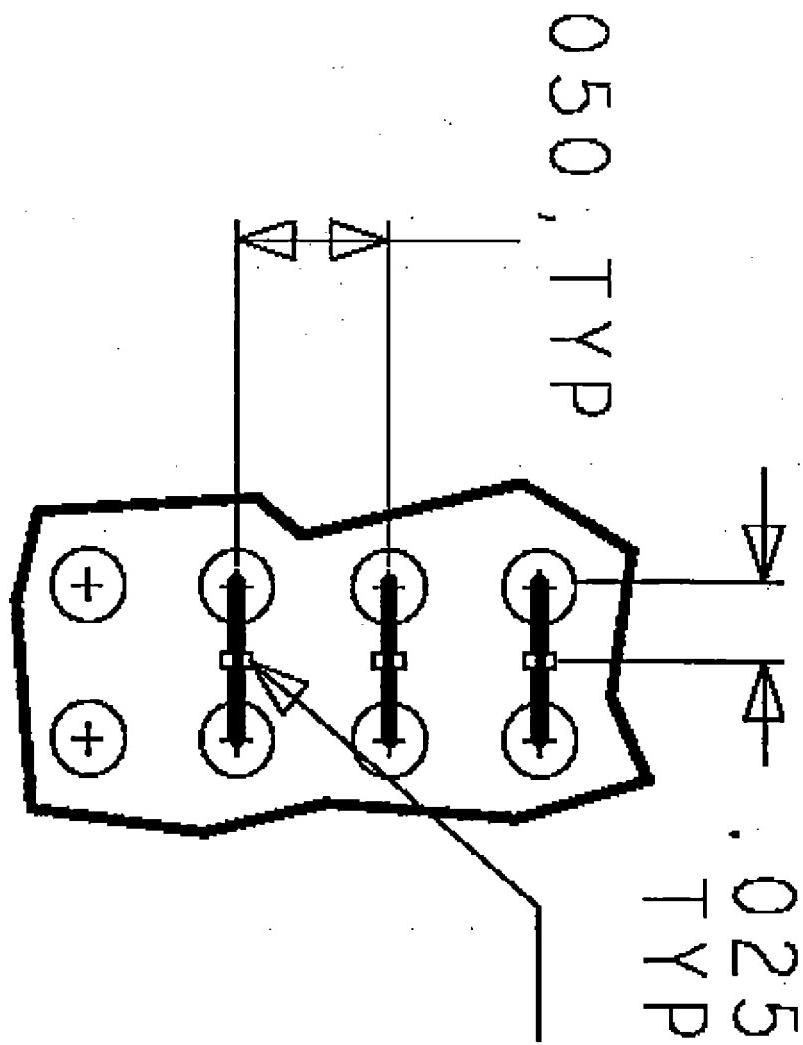
DRILL DIAMETERS (IN MILS)		
All Units are in mils		
FIGURE	SIZE	PLATED QTY
+	6.5	PLATED 168
O	20.0	PLATED 128
	250.0	NOT PLATED 2

UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE	CRAY INC 41 FIRST AVE S, SUITE 600 SEATTLE, WA 98104
DIMENSIONS ARE IN INCHES	DRILLER: GREG SCOTT	7/11/00	
RELEASER: MR. S. HELLMIGEL	41 FIRST AVE S, SUITE 600 SEATTLE, WA 98104		
RELEASER: MR. P. MICHAEL	MR. MICHAEL		
RELEASER: MR. P. MICHAEL	MR. MICHAEL		
AMOUNT OF "P"			
FLEX			
PEAKI			
TOP PLANE			

RELEASER: MR. S. HELLMIGEL	7/11/00	FLEX
RELEASER: MR. P. MICHAEL	MR. MICHAEL	PEAKI
RELEASER: MR. P. MICHAEL	MR. MICHAEL	TOP PLANE
SIZE	FSM NO	DWG NO
B		701651
SCALE	RELEASE:	REV
1:1		B
SHEET		
1 OF 1		

LASER CUTTING PLATING
DET A I L

11

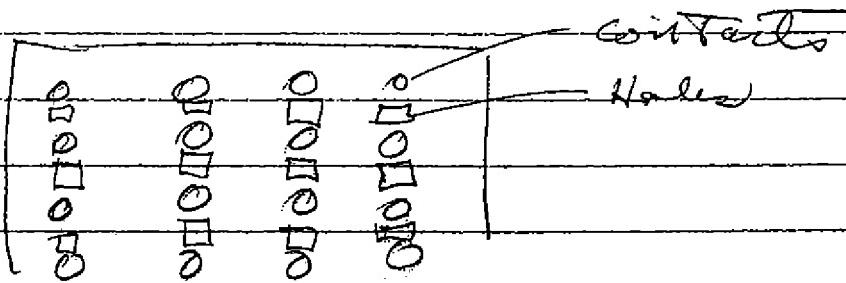


050, TYPE
025
LASER CUT PLACES
005 X .010

901115, 430

Conpliant in area of contacts
more contact / less force

Holes in connector



Add to 430

like on screen so individual
contacts can move independently
out of plane

Take out material constraint
local deformation

Conform to Terrain of printed
circuit board